Fraud-Related Case Method: an Evidence from Professional Ethics Course

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Abstract. Previous research has found indications of academic dishonesty in online learning. Therefore, students need more dense and complex activity-based learning to anticipate laxity in achieving learning outcomes. At the same time, the Ministry of Education and Culture (2021) recommends implementing the case method in learning in higher education. The Case Method is seen as capable of providing valuable learning experiences and placing students in complex learning situations. Based on this view, we expect that the case method can involve students in in-depth learning activities and, in turn, can control academic dishonesty in IT-mediated learning. Therefore, this study aims to 1) examine the effect of the Fraud-related Case Method on academic dishonesty and 2) examine the effect of the Fraud-related Case Method on student involvement in learning. This study involved students of the Department of Accounting, Faculty of Economics, Medan State University, as a research subject. Specifically, the sample of this study were students involved in business ethics courses. This course is seen as having enormous potential to teach moral reasoning in an integrative manner. The research will be carried out using a between-sample quasi-experimental method. This study using descriptive statistics and the Mann-Whitney U Test to analyse the collected data. The results show that the fraud-related case method has no effect on controlling academic dishonesty. This condition is thought to occur due to social desirability bias. Social desirability bias is prone to occur in ethical research because subjects tend to position their perceptions following normative social desires. This study recommends improving the design of the fraud-related case method, which is more rigorous and refers to students' learning characteristics.

Keywords: Fraud, Cheating, Academic Dishonesty, Case Method, Business Ethics.

1 Introduction

The learning process in education is an activity that produces more than just success in getting good grades; more than that, it is a process of mastering knowledge and generating ideas. Today's massive Information Technology (IT) innovations have helped the educational process regarding access to information, teaching materials, learning media, teaching and learning strategies and techniques [1]. Unfortunately, IT innovation simultaneously carries a risk to the existence of the student learning experience, which is the essence of learning. This vulnerability to learning experiences occurs in opportunities for academic dishonesty such as plagiarism, free-rider behaviour, social loafing, and surface learning [2]–[4]. Czerniewicz et al. [5] suggest that there are serious challenges faced by lecturers not only in developing learning materials and delivering them virtually but also in aspects of learning reflection and

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engagement, which tend to be loose. It is allegedly the negative impact of online learning.

The very easy accessibility of information currently opens up opportunities for fraud in academic activities. Without ethical awareness, anyone can access information and use it pragmatically to complete assignments in lectures [6], [7]. This can put students in the act of plagiarism and freerider. Furthermore, this act of plagiarism and free rider harms himself as a learner. Instead of being immersed in the learning process, students are trapped in surface actions, simply taking other people's work to complete their assignments until they get grades without an in-depth learning experience [2]. Regarding constructivism and social learning theory, the learning process lies in interactions between students and other learners and between students with intense and in-depth teaching materials to generate new thoughts or ideas [8]–[10]. With pragmatic and not intense interactions, students will lose constructive thinking experiences so that the essence of the learning process will be lost.

In fact, at the same time, in 21st-century learning, students have been increasingly required to master problem-solving, creative thinking, and critical thinking skills in the last two decades [11]–[14]. Learning in the 21st century requires students to generate new ideas during the learning process [15]. At this point, learning outcomes can be papers, frameworks, blueprints, and even new software. Suppose students are immersed in a pragmatic learning process and are even prone to academic dishonesty. In that case, students will undoubtedly find it difficult to develop 21st-century skills within themselves, which will produce difficulties in entering the world of work, whether as a teacher, public servant, professional worker, or businessman.

To anticipate these risks, this study applies two general strategies. They are, firstly, using the case study method to the learning process to place students in complex learning situations and close gaps in academic dishonesty throughout the learning process. Second, build student ethical awareness by making fraud-related materials a case students must explore. Thus, this study targets in-depth learning processes and the construction of moral knowledge through a deep understanding of the destructive effects of fraud. Although the case will be discussed from the professional ethics perspective, the relation of fraud to various aspects of life will undoubtedly be further interpreted by students. Formally, this study aims to 1) Investigate the effect of the Fraud-related Case Method on academic dishonesty and 2) Investigate the effect of the Fraud-related Case Method on student involvement in learning activity.

The case study approach was found to be able to provide rich learning in the process of achieving learning objectives, such as through the development of analytical skills, decision-making skill, critical thinking skill, and reasoning development [16]–[18]. These complex skills can be transferred to fellow students through interactive and team-based learning that can accommodate communication between students, interpersonal relationships, creativity, self-management, problem-solving, and decision making [19]. This approach was increasingly adopted in accounting education, and the literature discussing it continues to grow [20]. In fact, Accounting professional bodies have used case studies and exam scenarios [17], [21]. Concerning controlling academic dishonesty, the case method is expected to build moral reasoning in students. Moral reasoning is ideally able to internalize ethical behaviour in students. The formation of moral reasoning and the internalization of ethical behaviour will ultimately shape student self-regulation, as stated by Bandura and Walters [8]. Learners with good self-regulation will be able to control themselves from various destructive situations with similar principles. With good self-regulation, students are expected to be able to control themselves to engage in deep learning even though opportunities for cheating are accessible. This happens because of his awareness of the importance of the learning process, namely, to develop himself. With this awareness, students will be able to avoid unethical behaviour in

academic dishonesty.

The case method involves students dealing with applying knowledge in the real world. At the same time, Mihret et al. [22] justify the case study approach as a sensible pedagogical option for auditing because real-world auditing practice requires professional judgment and decision-making skills. Using the case method in auditing avoids single-solution scenarios. It encourages experimentation from various subjects' knowledge, allowing critical analysis and an in-depth understanding of the cases to be solved [23]. Referring to Mihret et al. [22] case design, we adapted and implemented it in the professional ethics course. Students are expected to understand the essence of fraud and its destructive effects through analysing and absorbing complex and in-depth knowledge. In this approach, students must develop the ability to critically evaluate the information provided in case studies to identify related (interdisciplinary) issues to be considered in solving the cases proposed [24]. Thus, students will gain a deep, substantive and fundamental understanding, which, in turn, they will be able to adapt in a broader context not only to business issues but also academic ones.

2 Research Method

The population of this study were accounting student who were registered in professional ethics courses. This course was chosen because of its suitable characteristics for integrating ethical values in direct cases. We use the individual as the unit of analysis of this study because academic dishonesty is represented as individual behavior instead of group or institution. The research subjects consisted of three classes, two of which would be involved as the experimental group while the other would be the control group. Research data was collected using non-test instruments [25]. The instrument is used to measure perceptions of academic dishonesty and perceptions of student involvement. In collecting perceptions of academic dishonesty, the questionnaire was designed anonymously to avoid social desirability bias from the responses [26], [27]. This is important because academic dishonesty is related to ethical dilemmas that are vulnerable to biased responses in research. Furthermore, this study adopted the Ministry of Education and Culture [28] recommendations of the case method design and case method design in the auditing subject developed by Agarwal and Hancock [29]. Furthermore, researchers adjust that concept to the business ethics subject and relevant fraud cases. In detail, the experimental design can be reviewed in the following sub-section.

2.1 Procedure of Experiment

This study used a quasi-experimental design between samples. Data was taken from students through self-reporting. We use questionnaire which gived to students on specific schedules in professional ethics courses, which were determined after treatment. The instrument contains measures of academic dishonesty intentions and engagement responses in learning using the fraud-related case method. The instrument was designed in the form of a questionnaire in an electronic format with closed questions. The fraud-related case method developed and implemented in this study refers to the recommendations of the Ministry of Education and Culture [28] to apply the case method to learning in higher education. The case study implementation refers to the Agarwal and Hancock [29] case study design in the auditing course, as follows:

a. *Case Orientation*. Lecturers (practitioners) submit fraud cases in accounting audits that result in company failure (e.g. the Enron case). Emphasis on the explanation of the orientation of the case on the aspects of fraud and moral hazard that occurred in the case.
b. *Case Evaluation*. Students are asked to evaluate the business case and assess the risks and destructive impacts of fraudulent financial reporting (fraud).
c. *Analysis*. Asking students to discuss and exchange their views with other groups and respond to the opinions of peer groups by developing substantive procedures to mitigate fraud from a professional ethics perspective.
d. *Reports*. Asking students in groups to carry out procedures: a) Evaluation of ideas from substantive procedures designed between groups; b) Prepare a summary of the proposed procedural differences between groups; c) critically explain the impact of fraud committed on the company's financial statements.

The case study in this study was applied after the mid-term test. This is done because, in the middle of the second semester, students are assumed to have sufficient theoretical knowledge to solve the proposed case. Because one case study will cover all the material studied in professional ethics. In this regard, the lecturer first prepares a comprehensive and sustainable learning design. Students will be asked to report all the progress of their assignments in a portfolio of assignments and group work reports.

In the process of case solving, each group of students is asked to disseminate their reports in front of their colleagues. The presentation of case solving ideas is intended to deliver broader discussions with peer reviews so that students can engage in constructive discussions [27]. Each audience group is also encouraged to give feedback to presenter groups as the added value of the discussion. Furthermore, at the end of the course, a post-test was carried out related to students' perceptions of involvement and perceptions of academic dishonesty. The measurements of academic dishonesty were collected by self-reporting questionnaires from each student. The post-test results were then compared with the control group's, which was not given the treatment.

2.2 Data Analysis

We used the Mann-Whitney U Test to analyze the data. The Mann-Whitney U Test is useful to examine the significance of differences in the academic dishonesty response and academic performance of two sample groups, namely control and experiment. The Mann-Whitney U Test was also chosen because the data conditions did not meet the normality assumption, so non-parametric analysis is more suitable for data analysis. With this technique, researchers can determine the significance of the effect based on actual behavior. Furthermore, we use SPSS 19 software to operate the statistical analysis. So that, we observed the result of SPSS 19 to analyze the statistical result. The sig value indicates the level of the difference between groups. We use $\alpha = 5\%$. Therefore, if the sig. <0.05, then the result indicate that two groups of sample are significantly different [30].

3 Result and Discussion

3.1 Descriptive Statistics

In general, the information related to descriptive statistics is observable in Table 5.1 below. The sample descriptive statistics show that the total experimental and control samples consisted of 102 participants. Sixty-five were included in the experimental group, and 37 were included in the control group. In the Cheating, Plagiarism, and Engagement variables, it appears that the mean scores of the experimental and control groups are not far from 10.585 and 10.243 in the Cheating variable, 8.231 and 8.027 in the Plagiarism variable, 33.477 and 33.405 in the Engagement variable. Furthermore, there was a significant difference in the Unauthorized Collaboration variable in the average score, namely 11.692 for the experimental group and 9.946 for the control group. However, interestingly, the control group's score for academic dishonesty was smaller than the experimental group. This condition indicates that student academic dishonesty in the control group is more controllable than in the experimental group.

Table 1. Descriptive Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Cheating	1.00	65	10,585	3,201	0,397
	2.00	37	10,243	3,378	0,555
Unauthorized Collaboration	1.00	65	11,692	3,297	0,409
	2.00	37	9,946	3,628	0,596
Plagiarism	1.00	65	8,231	2,662	0,330
	2.00	37	8,027	2,833	0,466
Engagement	1.00	65	33,477	3,391	0,421
	2.00	37	33,405	4,810	0,791

3.2 The Result of Independent Sample Test

The results of the independent sample difference test can be reviewed in Table 5.2 below. The Independent-Samples Mann-Whitney U Test Summary test results were reviewed by observing the Asymptotic Sig. with a critical value of 0.05 (α. 5%). Academic dishonesty in this study is reviewed from Cheating, Unauthorized Collaboration, and Plagiarism. The analysis results show that the fraud-related case method does not affect cheating with an Asymptotic Sig value of 0.689. The same thing is also found in the Plagiarism variable; the fraud-related case method does not affect Plagiarism with the Asymptotic Sig. of 0.760.

Furthermore, the Unauthorized Collaboration variable found a significant difference between the experimental and control groups. However, referring to the descriptive statistics, the experimental group's Academic Dishonesty scores were higher than the control group. So, these results do not support the research objective. Thus, the first research objective is not supported.

Furthermore, testing the mean difference in the engagement variable also shows no difference in student engagement between the control and experimental groups with an Asymptotic Sig score equal to 0.551. These findings indicate that the fraud-related case method does not affect student engagement in professional ethics courses. Thus, the second

research objective is not supported.

Table 2. Independent-Samples Mann-Whitney U Test Summary

Indicators	Variable			
	Cheating	Unauthorized Collaboration	Plagiarism	Engagement
Total N	102	102	102	102
Mann-Whitney U	1145,500	840,000	1159,000	1286,500
Wilcoxon W	1848,500	1543,000	1862,000	1989,500
Test Statistic	1145,500	840,000	1159,000	1286,500
Standard Error	142,593	142,932	142,364	140,975
Std. Test Stat.	-0,400	-2,536	-0,306	0,596
Asymp Sig. (2-sided test)	0,689	0,011	0,760	0,551

The results of this study show that the fraud-related case method does not significantly impact controlling academic dishonesty or engagement among students taking professional ethics courses. Researchers suspect this phenomenon occurs due to social desirability bias. Social desirability bias often happens in research that seeks to capture ethical phenomena because respondents are worried that they will be seen as not following societal norms [26]. Someone will try to appear to be acting ethically when asked a non-ethical question. The second reason that might occur in this study is the inappropriate case method design related to its suitability for student characteristics. Researchers suspect that it is necessary to carry out continuous improvements regarding the design of the fraud-related case method, referring to the characteristics and expectations of students in learning professional ethics. The discussion regarding the characteristics and expectations of these students is further explored through indicators of motivation for tactical actions carried out by researchers in the follow-up analysis.

4 Conclusion

The objectives of this study are to examine 1) the effect of the Fraud-related Case Method on academic dishonesty and 2) the effect of the Fraud-related Case Method on student involvement in learning. The research subjects of current study were accounting students at Medan State University (Unimed) who were involved in learning professional ethics, which was held in a blended manner. This study found that the Fraud-related Case Method did not affect academic dishonesty and student involvement in learning. Researchers suspect a social desirability bias problem from the responses given by students [26], [27]. We argue that students tend to provide ideal answers in addressing academic dishonesty behaviour. This is very likely to occur in ethics research because students will be worried that giving an honest perception of their non-ethical actions will impact the value that the lecturer will provide them with. Thus, there was no significant response difference between the control and experimental groups.

Furthermore, we suspect that the learning design of the fraud-related case method cannot sufficiently internalize moral reasoning within students. This can occur due to several reasons, for example, 1) the suitability of the topic of the case with student interests; 2) the level of

student participation in discussions; 3) the limitations of the dynamics of discussion in class; and 4) lack of maturity in the analysis of student learning needs and characteristics [22], [31], [32]. Mihret et al. [22] suggest that even though the centre of learning in the case method is students, the lecturer has a critical role in the case method. The lecturer acts as a facilitator who arouses student involvement in discussions and debates and expresses opinions by presenting stimulant questions to encourage discussion and asking probing questions to generate critical thinking about the issues to be discussed [22]. Therefore, generating learning dynamics by lecturers is an essential variable in internalizing students' ethical behaviour, which can then control academic dishonesty. Debate, disagreement, and conflict are critical approaches to facilitating the exchange of knowledge, exploring information, and constructing new thoughts [20], [33]. Thus, lecturers' understanding of student learning behaviour and orientation is needed to make case discussions attractive, warm, and practical [32].

Based on this study's results, we recommend that higher education lecturers orient students to control academic dishonesty by targeting academic and non-academic indicators. The case method with general cases cannot accommodate the purpose of internalizing ethical behaviour in students. Lecturers need a specific case design that is directly related to the characteristics and orientation of students' thinking to generate personal interest and ethical awareness. Thus, besides providing learning related to the subject matter, lecturers must also design learning to achieve a healthy and ethical academic culture.

This study has limitations on the credibility of the data, which is vulnerable to social desirability bias. Controlling social desirability bias on a more rigorous and careful research design will be able to collect data with high phenomenon purity. The purity of the data will produce analysis results that represent reality so that the policies taken from the research results will effectively control unethical actions in academic activities in higher education. In future research, we recommend lecturers to 1) redesign the fraud-related case method referring to the characteristics and expectations of students in related learning; 2) controlling for social desirability bias with a more careful data collection design in reducing bias; 3) controlling academic dishonesty by teaching the understanding of unethical actions directly and carrying out continuous habituation through actual actions. 4) Controlling academic dishonesty through lecturer figures as role models so that they can become a reference for students in ethical behaviour in academic activities.

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